**The Core and MORE Instruction Checklist**

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| **The CCSS Standard: 6.EE.2, 6.EE.2A, 6.EE.2B, 6.EE.6**  **The Envision Lesson: 2-1 Using Variables to Write Expressions** | |
| **EXPLICIT INSTRUCTION**  **I do it, We do it, Y’all do it, You do it** | **ENGAGEMENT**  **All Students Saying, Writing, Doing** |
| **PROACTIVE PLANNING** | **VOCABULARY WORDS** |
| The following questions should be considered for each part of the lesson:   * What are the predictable failures for this lesson? (conceptually and behaviorally) * How will you prevent these failures? * What will you do to maintain consistency? * How will you know if it is working? | Variable  Algebraic expression |
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| **ANTICIPATORY SET** (5 MINUTES) | |
| Choose from the many options:   * *Review What You Know* * *Interactive Math Stories* * Math Journaling * *Spiral Review* * *Problem of the Day*   Spiral Review 2-1 or  Extension for Lesson 2-1 (located on pg. 59A in the back of topic 2 manual) an alternate activity to activate background knowledge on variables from previous grades. | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **BUILDING A FOUNDATION** (5-10 MINUTES) | |
| *The Language of Math*: Vocabulary instruction: variable, algebraic expression   1. How will you explicitly teach new vocabulary?   :Screen shot 2011-08-09 at 11.38.01 AM.jpg  Variable: Use the Frayer Model template above. Give students a copy of the template or have them draw it themselves. First, have a discussion about a bag of objects, number unknown. For example, hold up a bag full of candy bars. Tell them you have candy bars and you will call them ‘*c*’. Tell them you don’t know how many you have, and that ‘*c*’ could stand for any number that would be in the bag. Ask the students if they know what the word is that is a number that can change, that can be represented by a letter. If they come up with the correct word, variable, have a student rephrase the definition, and then add it to the students’ Frayer Model. If they do not come up with the correct word, teach it to them. Discuss the characteristics (represented by a letter, can be any letter, etc.), give examples and non-examples to complete the Frayer Model.  Algebraic expression: Continue using the Frayer Model template (use a new one for each vocabulary word). Hold up 3 bags of candy bars and tell the students there are the same number of bars in each bag, but you don’t know how many there are. Tell them ‘c’ still stands for candy bars, but ask them how they could write that there are 3 bags of candy bars, using the variable ‘*c*’. Once they have come up with the correct algebraic expression (3*c* or 3 x *c*), teach them the word algebraic expression. Ask them how an algebraic expression relates to a non-algebraic expression, such as 3 x 5. Have them brainstorm the parts that need to be included in an algebraic expression (constant, variable, operation). Discuss each part with them. Fill out Frayer Model, giving definition, characteristics & model, examples and non-examples. For the Characteristics and Model box, they could draw 3 bags of candy bars, labeled ‘c’ for a number of candy bars. Be sure to clarify that they do not know how many candy bars are in each bag, so they cannot use an equal sign in their expression, as the number could change.   1. How will you provide multiple opportunities for vocabulary to be used in context?   Use word wall strips, discuss different algebraic expressions using a variety of objects and situations (be sure to review addition, subtraction, multiplication, and division expressions). | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **WHOLE GROUP INSTRUCTION: Concrete** (10-15 MINUTES) | |
| *Develop the Concept: Interactive Learning (Hands-on)*  In partners, distribute manipulatives (counters, base ten blocks, etc.). Model one example of an algebraic expression that could be written. For example, in one hand, put an unknown number of blocks. Add to that number 3 more blocks. The written algebraic expression would then be *x* + 3. Do an example for addition, subtraction, multiplication, and division. Assign each group one problem per operation. Record work on whiteboard or paper. They will choose one to share with the class.   1. What materials/manipulatives will you need?   Counters, base ten blocks, anything you have a lot of   1. Will each student have enough materials to model the problems? Yes, in partners   -If they do not, will you have them pair up or adjust the problems? Yes, if needed.   1. Where will students record their work during this phase of the lesson? Whiteboards, paper 2. How will you check for understanding during this phase of the lesson? Teacher monitoring during work, students will present one problem to the class 3. Will you use the *Extend?* The extend problem says “Write a word phrase for 5*k* + 3. (sample answer: Three more than 5 times a number.)” Have the students write in word phrase form the expressions they created. 4. Will you use the *Link to Investigations*? No. | * Choral Responses * Partner Responses * Written Responses   + Paper   + Math Journal   + Individual Whiteboards   + Student page from the topic pouch * Random call on students (No hand raising) |
| **SCAFFOLDED INSTRUCTION: Representational** (15-20 MINUTES) | |
| *Develop the Concept: Visual*  The *Visual Learning* Bridge, at the top of each lesson, is critical to connecting the Concrete to the Representational and then to the Abstract. Look for *Prevent Misconceptions*.  Choose one option:   * + *Visual Learning Animation* (on-line or CD)   + Overhead Transparency   + *Visual Learning* Bridge in Student textbook   + Document camera   Use one of the above options to practice as a group writing algebraic expressions in a table (see textbook or teacher edition pg. 32-33). Ask the questions and have students answer in journals, or in partners, or random calling on students.  Prevent Misconceptions: Some students might mistake the multiplication sign in “10 x *n*” for the variable x. Stress that to avoid this confusion we prefer to write this expression as 10*n*. Ask ‘What does 10*n* mean?’ to check for understanding.   1. Check for understanding during the *Guided Practice*. Have a few students do a problem in front of the class on whiteboard. 2. Where will students record their work? Individual whiteboards, journals, scratch paper 3. If most students are struggling during this phase of the lesson, you could…    * Reteach explicitly with various problems from the *Guided* or *Independent Practice* or the *Reteaching* sets at the back of the *Topic Guide*.    * Use lessons from *Meeting Individual Needs.*    * Use the *Differentiated Instruction: Intervention* lesson. 4. Will some of the problems from the *Problem Solving* be included in your *Guided Practic*e or *Independent Practice*? Yes, both. | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **INDEPENDENT PRACTICE: ABSTRACT (**15-20 MINUTES) | |
| *Independent Practice* and *Problem Solving*   1. Which problems will you assign? Either Independent Practice and Problem Solving in the textbook (pg. 33) or copy the Practice/Reteaching/Enrichment based on student ability. 2. Where will students record their work? On a piece of paper or their worksheet 3. Will you collect, grade and record the independent practice? Yes. 4. How will you check for understanding? Quick check, work with small groups, grade homework, final topic test, CFA 5. If students do not finish the problems assigned for independent practice, will these problems be homework? Yes. | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **FORMATIVE ASSESSMENT** (5-10 MINUTES) | |
| Concept Understanding   * + PLC/Grade-Level common formative assessment   + *Quick Check* (in *Teacher Resource Masters)*   + *Writing to Explain*   + *Mind Game Quiz Show*   + Student buzzers or AverPens   Formative Assessment Tools   * + *Topic tests* (online or in text)   + *Item Analysis for Diagnosis and Intervention*   + *Free-Response Test*   + *Performance Assessment*   + CBM-Math   + PLC/Grade-Level common formative assessment   + Other assessment tool   End of each Quarter:   * + *District Common Formative Assessment* (CFA) | |
| **CENTER ACTIVITIES** (15 - 45 MINUTES)  \*This part of the lesson is beneficial for providing engaging activities while the teacher works with small groups of students who need supplemental instruction. | |
| Choose from the many options:     * + *Differentiated Instruction*   + *Math Project*   + *Meeting Individual Needs*   + Teacher-led interventions   + *Leveled Homework*   + Online games from *Envision Digital Premium*      1. Will you do these activities and if so, when? If time allows, or during a math rotation based on ability groups. 2. When will you give directions on how to play? 3. What materials will be needed for the activities? 4. Will you work with the Intervention group? 5. How will you determine which activities will be assigned to each group of students? | |
| **HOMEWORK** | |
| Choose from the many options:   * Finish *Independent Practice* and/or *Problem Solving* assignment * *Spiral Review* * *Quick Check* * *Leveled Homework* * Online games from *Envision Digital Premium* * Online tutorials from *Envision Digital Premium*  1. Will you collect and grade homework? 2. Will you discuss homework? Is so, when? | |